

CLAIMS

- 5 1. A sensing device for use with a surface having coded data disposed on the surface, the coded data being indicative of an identity of a region associated with the surface, said device including detection means arranged to detect the coded data and to generate region identity data indicative of the identity of the region using the coded data, and attachment means for facilitating attachment of the device to a writing implement.
- 10 2. A sensing device as claimed in claim 1, wherein the attachment means is adapted to facilitate attachment and detachment of the device to a writing implement.
3. A sensing device as claimed in claim 1, wherein the attachment means is a clamp.
- 15 4. A sensing device as claimed in claim 1, further including means for ensuring correct orientation of the device when the writing implement is held by a user during use.
- 20 5. A sensing device as claimed in claim 4, wherein said means for ensuring correct orientation of the device is a grip portion configured so as to correspond with a portion of a user's hand.
- 25 6. A sensing device as claimed in claim 1, further including calibration means for calibrating the device such that information indicative of the distance between a writing portion of the writing implement and the detection means is incorporated into said region identity data.
7. A sensing device as claimed in claim 1, wherein the attachment means is adapted to facilitate attachment of the device to a pen or marker.

8. A sensing device as claimed in claim 1, wherein the attachment means is adapted to facilitate attachment of the device to a pencil.

5 9. A sensing device as claimed in claim 1, further including motion sensing means configured to generate movement data indicative of movement of the sensing device relative to the region.

10 10. A sensing device as claimed in claim 9, wherein the motion sensing means is configured to generate the movement data using the coded data.

15 11. A sensing device as claimed in claim 9, wherein the motion sensing means includes at least one acceleration sensing means, the acceleration sensing means being configured to sense acceleration of the sensing device as the sensing device moves relative to the region, the motion sensing means being configured to generate the movement data by periodically sampling the acceleration.

20 12. A sensing device as claimed in claim 11, wherein the acceleration sensing means is configured to sense at least two substantially orthogonal components of acceleration.

25 13. A sensing device as claimed in claim 1, wherein the coded data includes a plurality of tags, each tag being indicative of an identity of a region within which the tag lies.

14. A system for capturing information applied freehand, said system including a sensing device as claimed in claim 1, and a surface having coded data associated with the surface.